

US005227615A

United States Patent [19]

Oogita

[11] Patent Number:

5,227,615

[45] Date of Patent:

Jul. 13, 1993

[54]	PORTABLE TERMINAL DEVICE				
[75]	Inventor:	Yoshinori Oogita, Ikoma, Japan			
[73]	Assignee:	Sharp Kabushiki Kaisha, Osaka, Japan			
[21]	Appl. No.:	737,308			
[22]	Filed:	Jul. 30, 1991			
[30]	Foreign Application Priority Data				
Aug. 9, 1990 [JP] Japan 2-211350					
[52]	U.S. Cl Field of Sea				
[56]	References Cited				
U.S. PATENT DOCUMENTS					
	4,683,550 7/1 4,705,211 11/1 4,719,338 1/1 4,774,399 9/1 4,872,091 10/1 5,043,562 8/1	988 Avery et al. 235/486 988 Fujita et al. 235/441 989 Maniwa et al. 361/395			

5,093,862	3/1992	Scartz	235/380			
FOREIGN PATENT DOCUMENTS						
84582 1-237785	3/1989 9/1989	Japan Japan				

OTHER PUBLICATIONS

R. S. Carter et al, High Performance Parallel Planar Package, IBM Technical Disclosure Bulletin vol. 21 No. 3, Aug. 1978 pp. 1137-1138.

Primary Examiner—John Shepperd Attorney, Agent, or Firm—Nixon & Vanderhye

[57] ABSTRACT

A portable terminal device includes a printed wiring board having two main sides, a first interface for a first information data exchanging card disposed on one of the two main sides of the printed wiring board, and a second interface for a second information data exchanging card disposed on the other side of the two main sides of the printed wiring board. The first and second cards can be installed on both sides of the printed wiring board in parallel to each other sandwiching the printed wiring board.

4 Claims, 2 Drawing Sheets

